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W. P. H.

Thesis
on Hydrothorax.
By
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of Charlotte County Virginia

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The general term dropsy is applied to a preternatural collection of watery or serous fluid, in any natural cavity of the human system. Under this general head are included several varieties of the disease which, derive their name for the most part, from the Greek word ὕδωρ and the name of the part in which this unnatural collection of water is found. Hydrocephalus a dropsy of the head, derives its name immediately from the Greek word, ὕδωρ and κεφαλή. Hydrothorax from ὕδωρ and θωρὰξ. There is then several forms of the disease differing from one another, only, as to the part in which they are seated. Many of the following remarks therefore, although intended to apply particularly to Hydrothorax, will be also applicable to other forms of the disease.

To account for the manner in which the disease arises let it be recollected that, according to a law of our nature, the different cavities of our body have their surfaces continually moistened by the effusion of watery or serous fluids. These fluids are again reassumed by the absorbents and carried to different parts of our system. The action of the exhalents and absorbents is always balanced during the continu-

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ance of health, so that there is found in the different cavities no more of this fluid than is necessary to lubricate their surfaces. An interruption to this equilibrium of action is what gives rise to the disease. It is very easily perceived that this equilibrium may be destroyed in two different ways; first by a diminished exhalation or diminished absorption.

The first an increased exhalation is produced by any interruption to the return of blood from the different parts of the body to the heart. Hence it is that schirocities in the right ventricle are known to have frequently produced the dropsy.

The fact that persons subject oedematous swellings of the lower extremities, always have this effect increased by standing in an erect posture adds some confirmation to the above remark. In this situation only the weight of the blood is opposed to its return, yet its effects are very readily perceived.

Schirocities in the liver are also known to have produced the disease. It is stated by Cullen, than whom no higher authority could be produced, that schirocities of

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liver alone are the only causes of this kind, productive of the disease. The experience of other highly respectable physicians however, proves the error of this opinion. It is well ascertained that schirocities in other viscera, as also, tumors forming obstructions in different parts of the body frequently give rise to the dropsy.

A diminished absorption of the fluid poured out by the exhalents was mentioned as another cause, or manner in which the dropsy arose. This we think is owing to a laxity or general weakness of the system. The frequent instances of dropsy in persons of weak debilitated habits, especially after long continued illness is urged as a proof of this opinion. Paralytic limbs such as might naturally be expected to be affected with this weakness are also frequently subject to this oedematous swellings. In this way we account for the numerous cases of this disease following an unsoundness of the digestive organs which, "by impairing the nourishment of the body by vitiating the blood, adds strength & vigour to all other agents" the use of spirituous liquors says Dr. Blackall greatly contributes to this in cavalle taint, & independently of this effect

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has been thought by many capable of exciting a true dropsy.
Leaving this very imperfect account of the manner in which
the disease arises we now pass on to a short diagnosis of
the Hydrothorax. This indeed must be a most diffi
cult task, for the most experienced physician is some
times puzzled to distinguish one disease from another
The Hydrothorax generally commences with a dull hea-
vy pain in the lower part of the thorax, sometimes com
pared by those afflicted with it, to a heavy weight in that
part of the breast. A difficulty of breathing quickly fol
lows which sometimes terminates in suffocation and death of
the patient. Palpitation of the heart, inability to lie in
a recumbent posture, sudden starting from sleep, great
coldness & numbness particularly of the upper extremities are
also symptoms of Hydrothorax. No one of these circum
stances however can be taken as positively conclusive. our
diagnosis is to be formed not from one but from a combi
nation of symptoms. A pale sallow face, a dull
discontented, rather than a sanguine countenance, also indi-
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irregular intermitting & frequently feeble — If the urine accompanying these symptoms be high coloured & scanty, if a cough dry in the commencement afterwards moist, oppress the patient, finally if all these symptoms continue to increase & become more & more troublesome to the patient we may conclude on the existence of hydrothorax. The legs of the patient are generally oedematous at night, the patient generally feels more at ease on one side than the other, and perhaps more easy on his back than in either position. A fluctuation of water in the chest, perceived by the patient himself or by the practitioner — is the most certain of all symptoms.

Great attention and care should always be paid to this part of our duty. The young physician should be particularly careful in forming correct opinions as to the nature of diseases: let him there be guided by the experience of the aged, and his labours must eventually be crowned with success

As soon as we clearly ascertain the existence of hydrothorax our remedies are to be promptly applied. It is said by some eminent Physician that dropsy of the breast is entirely without

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the controul of our power. It is called the opprobrium of medicine; a reproach to our blessed art. But the experience of others proves the error of this opinion & declares hydrothorax as curable as most other forms of dropsy — so unyielding to remedies however, has the disease proved even in the hands of the most skilful, that no spring must be left untouched no wheel unmoved —

In our treatment the cause symptoms and duration of the disease must be attended to; as also, the age strength and constitution of the patient; circumstances too tedious to be particularly detailed in this place — indeed as Dr. Monro very justly observes, it is entirely unnecessary for no one need be told, (Ceteris paribus) that, a hydrothorax of old standing is more difficult of cure than, one of recent origin; that the young recover from diseases that would kill the aged; that persons of strong constitutions stand a better chance of recovery, than those whose constitutions have been worn out by long continued dissipation.

In the treatment of hydrothorax our first object should be to

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evacuate the fluid giving rise to the disease & then we should endeavour to prevent its reaccumulation. As to the course of treatment here to be pursued there is we believe but little difference of opinion. At least among phisicians of our own country there has been a singular coincidence of opinion in this respect. We attribute this unanimity to a successfull experience, and shall therefore content ourselves by laying down the plan of treatment generally followed by practitioners of our own country.

As the disease sometimes appears of a decided inflammatory character, and at other times not partakingsomuch of this nature it is necessary that some attention should be paid to this subject. Dr. Blackall in his treatise on dropsy has presented a number of cases, or series of experiments which, he thinks affords a certain criterion of the nature of the disease. The urine says this learned physician affords a certain test as to the character of this disease; being like the blood, coagulable by heat when the disease is of an inflammatory character. Certainly the urine should be strictly attended to in this disease; but

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as is observed by some author, phisicians of this country would be very unwilling to exchange the pulse, for any other criterion of inflammation. In short our opinion in this respect should be formed not from the pulse alone, but from the appearence of the urine and every other symptom of inflammatory action.

As a general rule phisicians agree that blood letting is the most proper remedy the commencement of the disease In high inflammatory cases, no remedy can be compaired to Venae Section. It equalizes excitement & lessens arterial action, thus it becomes a most powerful remedy in Hydrothorax. We should always be careful however not to prostrate the system by the use of the Lancet. Repeated bleedings should be preferred to such quantities, drawn at once, as would reduce the strength of the patient.

Topical Blood letting has also been employed. As small quantities taken in this way are frequently in other diseases more advantageous than larger quantities from the arm it may perhaps be useful, though we believe the practice is not very common. — Blisters and Leatons have also been used with no little benifit.

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Emetics have also been prescribed with no better benefit: a copious evacuation of watery fluid has followed their administration. In cases their use must be left to the discretion of the practitioner. they have at the present day given place to Cathartics.

Of the utility of this class of articles in dropsy no one can be ignorant, who is at all acquainted with the practice of medicine. The most drastic articles of this class were most commonly used by the ancients. The distress of their operation, the rapidity with which the water reaccumulates after their administration, & the consequent repetition of these remedies render them altogether inadmissible in many cases. Moreover if the disease be not removed by them, it must certainly be provoked, and a debility particularly of the digestive organs must follow; on this account we generally prefer the milder articles of this class. The Sup: Tart: Pot: in combination with Com: Jalapa is a very favourite prescription, with many practitioners. Besides its drastic effect its stools are copious and watery. this circumstance render it preferable to many other articles. It is generally given in the dose of one dram of the former & ten or fifteen gr: of the latter. Many of the other saline preparations are also used but the one just mentioned is the most common.

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We should not pass over this class, without mentioning the Elaterium; a remedy of the very highest repute. That insensible condition of the intestines sometimes accompanying dropsy is perhaps more certainly overcome by this, than, any other article. There cannot be found says Dr. Francis a more certain prescription, for the purpose of removing the urgent symptoms of Hydrothorax than Elaterium. It often produces immediate relief, by copious and frequent watery alvine discharges; while its action is occasionally manifested by an increase of urine - With this as with other articles it is proper to commence by small doses which should be gradually increased - Commencing with a sixtenth of a grain, of the extract it may sometimes be increased to the extent of five or six grains a day without any inconvenience - Nearly allied to this is the Croton Tiglium Its certainty of operation, together with the facility of its administration should render it an article of more general use - It is said to be useful in a sluggish condition of the bowels because it does not irritate like Scammony Gamboge or Aloes

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Leaving this class of remedies (of which perhaps we ought to say more) we now pass on diuretics, a class of remedies long ago employed for the purpose of evacuating the water of dropsies. They are less apt to weaken the system, and sooner prepare it for the administration of tonics. The kidneys might moreover very naturally be supposed to afford an easy outlet for the dropsical collections. These circumstances very early induced practitioners to turn their attention, to this class of remedies & experience has confirmed their great utility.

As of others many of this class of remedies have also been employed in hydrothorax, our intention however is only, to mention a few commencing with the Squill — three different preparations of this article are found in the shops, each perhaps equally applicable to the disease, but as it is most conveniently administered in pills than in any other form, it is more commonly thus used than in any other way. As this article affects some persons more easily than others, it is of no small importance to ascertain in any instance the proper dose. In order to accomplish this end the patient commence with a very small quantity and gradually

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increase the dose until the desired effect, or some degree of nausea be produced under this cover we may expect benefit instead of disasters to result from the use of the squill. In cases of obstructed viscera or where the squill alone has no effect we should combine a small quantity of Calomel. The power of mercury in obstructed viscera as well as its diuretic effect is well known: we may therefore place the greatest confidence & expect the greatest benefit from this remedy.

Another diuretic much used in hydrothorax is Digitalis, a remedy whose fortune has been various in the medical world. A contrariety of opinion as to the utility of Digitalis in hydrothorax exists even at the present day, the weight of authority however decidedly preponderates in favour of its efficacy. The infusion of the dried leaves is perhaps the most effectual manner of administering it. The dose is from one to two drams given three or four times a day. To derive full benefit from the remedy the quantity taken should be regularly increased. This should always be done with caution for the action of the article is sometimes slow or does not develop itself immediately after application, owing to peculiarities of constitution moreover very small doses may produce inordinate or

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astringing effects such as prostration of strength, nausea pain in the head, & over the eyes perverted vision vomiting and so forth. When these symptoms follow the use of the remedy it should should be discontinued immediately the tincture of Cantharides, Colchicum Autumnale, as also Nitro Garlic and other diuretics might here be noticed, but we think it unnecessary –

In weak and delilitated conditions of the system it will be necessary to administer tonics – This may be done either by giving them alone, or in union with some diuretic. The latter mode has been found very useful in many cases – Under this condition of the system weak gin and water sparingly taken has been found a very useful and no doubt a very agreeable remedy to many. As a tonic the cold Bath may under certain circumstances be employed. It should however be employed with caution, and not until the system has recovered some degree of vigour. As an assistant to these remedies gentle exercise in the open air may be advised – By exercise alone says Dr. Cullen many dropsies have been cured.

If all these remedies fail there is still another to which we

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